

REMARKS

The above amendment along with the following remarks are being submitted as a full and complete response to the Official Action dated July 16, 2002, the period for response expiring January 16, 2003.

Claims 1-3 and 8-9 are under consideration in this application. Claims 1-3 are being amended, as set forth above and in the attached marked-up presentation of the claim amendments, in order to more particularly point out and distinctly claim the subject invention. Claims 8-9 are being added to recited other embodiments described in the specification. Applicant hereby submits that no new matter is being introduced into the application through the submission of this response.

In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Formality Rejection

Claims 1-3 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite due to lack of proper antecedent. As indicated, the claims have been amended as required by the Examiner. Accordingly, the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

Prior Art Rejection

Claims 1-3 have been rejected under U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 6,378,949 to Maeda (hereinafter "Maeda'949"). This rejection has been carefully considered, but is most respectfully traversed.

The cushion structure used as a seat cushion or backrest of a seat, as now recited in claim 1, comprises: a quadrilateral frame of combined structure composed of an elastic quadrilateral frame body of elastic material 11 and a hard quadrilateral frame body 12 with one part 12a embedded in the elastic quadrilateral frame body 11 and another part 12b secured with a rim of a quadrilateral net 13, said quadrilateral net 13 being rolled up at a peripheral portion to be around a bottom surface and an external surface of the elastic quadrilateral frame body 11 and to be secured at the rim in a uniformly stretched condition so as to form a support portion of the seat cushion or backrest (Fig. 1). With such a construction of the cushion structure described above, the resiliency of the elastic frame body 11 is added to the resiliency of the net 13 to enhance the cushion property of the structure. The rim of the quadrilateral net 13 is secured to the hard quadrilateral frame body 12 by the mounting portion 14. The elastic frame body 11 is useful for eliminating a difference in tension of the net 13 and for retaining the entirety of the net in a uniformly stretched condition so as to provide the cushion structure without any local difference in cushion property.

Applicant respectfully contends that none of the cited prior art teaches or suggests such “a quadrilateral net is rolled up at a peripheral portion to be around a bottom surface and an external surface of the elastic quadrilateral frame body and to be secured at its rim in a uniformly stretched condition so as to form a support portion of the seat cushion or backrest” as in the invention.

In contrast, the bank skin 4 in Fig. 4 of Maeda’949, the only element rolled up around an elastic quadrilateral frame body, is rolled round the bank 3 and sewn to the elastic body 2 and the force cloth 6 (Fig. 3; col. 4, lines 12-14) without being integrated with any supporting net as one integrated piece as the quadrilateral net 13 of the invention. In Maeda’949, the back cushion B comprises a generally quadrilateral frame 1, a net-like resilient sheet 2 forming a back seating portion of a passenger, a pad member 3 forming a bulged edge of the seat cushion, a bank skin 4 covering the pad member 3. Further, the bank skin 4 in Fig. 5 of Maeda’949 is not integrated with any supporting net as one integrated piece, since the bank skin 4 is fastened by a slide fastener 9 with a back cover. Without an integral net-rim construction for the cushion structure as recited in claim 1, the resiliency of the bank 3 is not fully incorporated into the resiliency of the elastic frame body 2 or any net (if available) to enhance the cushion property of the structure.

Maeda et al. (6,231,125), Abu-Isa et al. (5,013,089), Maeda et al. (6,375,269) and Maeda et al. (6,152,534) were cited as pertinent references to the present application. However, all the Maeda references share the same deficiencies as Maeda’949 as shown in Figs. 10-11 of Maeda’125, Figs. 3, 7 and 10 of Maeda’269, and Fig. 4 of Maeda’534.

Regarding Abu-Isa, its elastic quadrilateral frame body 120 is a padding wrapping outside of the hard tubular frame body 12, 14 (rather than being wrapped inside by a peripheral portion of a net as in the invention. See Fig. 1; col. 9, lines 7-12. The hard tubular frame body 12, 14 in Abu-Isa appear to be metal such that their sides, such as the sides 31-34, can be selectively welded together as described in col. 5, lines 31. Moreover, the net/mat 16 is merely rolled up at a peripheral portion to be around a bottom surface and an external surface of the hard tubular frame body 12 (rather than any elastic quadrilateral frame body 11 of the invention, such as the reference no. 31 in Figs. 4-6, the reference no. 100 in Fig. 7, and the reference no. 110 in Fig. 8.

Applicant respectfully contends that one skilled in the art will not be motivated to combine the teachings in Abu-Isa and Maeda due to their conflicting application of the elastic quadrilateral frame body on the hard frame body.

In addition, Applicant cautions that any reliance by the Examiner upon the “common knowledge and common sense” of one skilled in the art to the motivation to modify or combine the teachings in Abu-Isa, Maeda or other references in the specific way has to fulfill the agency’s obligation to cite references to support its conclusions by providing the specific teaching of such a combination on the record to allow accountability.

To establish a prima facie case of obviousness, the Board must, inter alia, show “some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant

teachings of the references." *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). "The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved." *Kotzab*, 217 F.3d at 1370, 55 USPQ2d at 1317. Recently, in *In re Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002), we held that the Board's reliance on "common knowledge and common sense" did not fulfill the agency's obligation to cite references to support its conclusions. *Id.* at 1344, 61 USPQ2d at 1434. Instead, the Board must document its reasoning on the record to allow accountability. *Id.* at 1345, 61 USPQ2d at 1435.

See *In re Thrift*, 298 F.3d 1357.

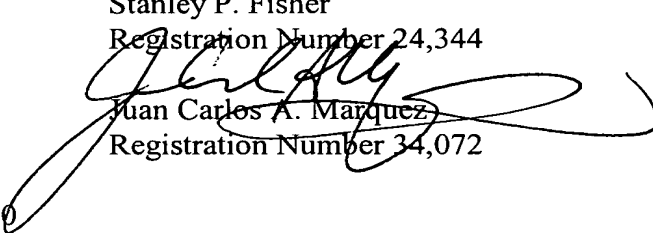
Accordingly, the present invention as now recited in all the claims is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicant respectfully contends that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

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Marked-up Version of Claims & Specification

1. A cushion structure used as a seat cushion or backrest of a seat, comprising [a square net stretched on] a quadrilateral [square] frame of combined structure composed of an elastic quadrilateral [square] frame body of elastic material and a hard quadrilateral [square] frame body with one part embedded in the elastic quadrilateral [square] frame body and another part secured with a rim of a quadrilateral net, said quadrilateral net is rolled up at a peripheral portion to be around a bottom surface and an external surface of the elastic quadrilateral frame body and to be secured at the rim in a uniformly stretched condition so as to form a support portion of the seat cushion or backrest[wherein each end portion of said square net is rolled up on the elastic square frame body of said square frame and fastened to the hard square frame body of said square frame].
2. A cushion structure as claimed in [Claim] claim 1, wherein a mounting plate is adhered to [each side end portion] the rim of said [square] quadrilateral net [is fastened] so as to secure said another part of the hard [square] quadrilateral frame body with the rim with the rim placed between the mounting plate and said another part of [said square] the hard quadrilateral frame body.
3. A cushion structure as claimed in [Claim] 1, wherein the elastic [square] quadrilateral frame body of said [square] quadrilateral frame is made of sponge, and [wherein] the hard [square] quadrilateral frame body of said [square] quadrilateral frame is made of metal.